CITY OF NEWPORT BEACH

COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION
3300 Newport Boulevard | P.O. Box 1768 | Newport Beach, CA 92658
www.newportbeachca.gov | (949) 644-3275

SOLAR VOLTAIC
ELECTRICAL PLAN REVIEW COMMENTS
RESIDENTIAL

Project Description:

Project Address: **Plan Check No.:**

Permit App. Date: Permit App. Expires:

Use: No. Stories: Permit Valuation:

Architect/Engineer: Phone:

Applicant/Contact: Phone:

Plan Check Engineer: **Phone:**

X	1st Review: (date)		2nd Review: *Italic comments*		3rd Review: **By Appointment**

The project plans were reviewed for compliance with the following codes and standards:

2010 CBC; 2010 CPC; 2010 CEC; 2010 CMC; 2008 Building Energy Efficiency Standards (BEES); 2010 California Green Building Standards Code (CALGreen); & Chapter 15 of the Newport Beach Municipal Code (NBMC).

The code section references are from the 2010 CBC and 2010 CEC, unless otherwise stated.

- *TO EXPEDITE PROJECT APPROVAL:* Please provide a written response indicating how and where each comment was resolved on the plans.
- Resubmit all previously reviewed plans, updated plans and supporting documents with each subsequent review.
- *AFTER 2nd PLAN REVIEW*: Please call the plan check engineer listed above to schedule a plan review appointment, to expedite project approval.
- For clarification of any plan review comment, please call the plan check engineer listed above.
- Plan review status is available online at ***www.newportbeachca.gov***. Project status is also available using the interactive voice response system at 949-644-3255, or by speaking with a permit technician at 949-644-3288 during business hours.

GENERAL

1. Add note to plans: "D.C. array conductors are to remain outside of building prior to fuseable combiner box or fuseable D.C. disconnect means. City of Newport Beach Building Department policy (unfused conductors into the building] & Fire Department [guideline D.04) do not recognize 2010 C.E.C – Article 690.14 [C] [1] exception or Article 690.31[E]. A fuseable disconnect means or fuseable combiner box is required outside of building prior to D.C. array conductors entering the building or penetrating the roof surface. [Recommend routing and installing all D.C. array conductors outside of the building]."

2. In addition to fuseable D.C. disconnect means or fuseable combiner box prior to D.C. array conductors entering the building or penetrating the roof surface. City of Newport Beach Fire Department requires the D.C. conductors inside metallic conduit entering into the attic space be installed 18 inches below the roof surface along its entire length in the attic space; or provide disconnect means located on the roof with remote shut-off. This disconnect means to be remotely shut-off by visible ON / OFF switch device located within 5 feet of the buildings main electric service. This may be achieved with a [U.L. listed or equivalent] 600 volt DC rated relay/contactor. Contact Fire Department for any other additional requirements [949] 644-3106 [Recommend routing and installing all D.C. array conductors outside of the building].

3. Provide D.C. array solar panel Voc and Isc ratings, show calculations per inspector/installer checklist [see attached] – Voc calculated @ x 1.13 [Temp Corr.] // Isc calculated @ x 125% [NEC – 690] x 125% [UL 1703].

4. System exceeds inverter maximum useable D.C. input current shown on inverter specification sheet.

5. Provide complete inverter and solar module manufacturer specification sheet.

6. Show all conduit and conductor sizes, include derating of conductors.

7. A.C. disconnect between inverter AC output and connection to utility to be a visible blade, lockable type disconnect listed for its use.

8. Distance between inverter and next downstream A.C. overcurrrent protection device to be maximum 25 feet. A.C. overcurrent device is required prior to entering the building.

9. Provide minimum 3 feet working clearances in front of all solar – voltaic equipment and 3 feet working clearances at side yard setbacks.

10. Verify main electrical service overcurrent device and buss rating. For a dwelling unit the sum of the ampere ratings of the overcurrent devices shall not exceed 120 % or the rating of the busbar or conductor.

11. Show existing main electric service equipment and ground electrode system, conduit and conductor sizes.

12. Ground electrode conductor from inverter to ground electrode to be minimum protection of bare armor sheathed cable, # 8 awg. minimum.

13. Show all signage required per 2010 CEC- Article 690. ~~and inspectors/installers checklist~~.

14. Add note to the plans: "Electric metallic tubing [E.M.T. conduit] not approved in exterior locations."

15. Add note to the plans: "D.C. array conductors are to be installed in galvanized rigid conduit from the solar array to the D.C. disconnect and Inverter.